INDEX

SECTION 1
FRANK JOHNSON
The Sixties — A Challenge to Industrial Engineers 15

SECTION 2
HENRY M. OWADES
Practical Industrial Engineering Research Applications 21

SECTION 3
JOSEPH D. CARRABINO
Some Proposals For A Unified Program of Management Controls 27

SECTION 4
THOMAS C. FISHER
Total System Concept — Bell Helicopter 33

SECTION 5
RAOUL S. DOBYNS
Solid Rocket Production — A Look To The Future 51

SECTION 6
RICHARD MUTHER
Systematic Layout Planning — A Patterned
Approach To Plant Layout Procedure 63

SECTION 7
RALPH O. SWALM
How Not To Make Equipment Replacement Decisions 71

SECTION 8
K. LIFSON
Work Sampling 77

SECTION 9
BURTON GRAD
A Model Of An Elementary Industrial Processing System 81

SECTION 10
JAMES R. WALKER
Control of Machine Member Position, Discrete vs. Continuous 89

SECTION 11
JOHN M. BARKSDALE
Work Measurement & Methods In The Process Industry 97

SECTION 12
WALTER G. SEINSHEIMER
Labor-Management Problems 99

SECTION 13
EDWARD LUFTIG
The Managerial Problems of Industry And
Their Industrial Engineering Implications 107

SECTION 14
L. R. BECHT
Improved Government Through Industrial Engineering 113

SECTION 15
HAROLD O. DAVIDSON
The Next Decade In Operations Research 121

INDEX

SECTION 1
FRANK JOHNSON
The Sixties — A Challenge to Industrial Engineers 15

SECTION 2
HENRY M. OWADES
Practical Industrial Engineering Research Applications 21

SECTION 3
JOSEPH D. CARRABINO
Some Proposals For A Unified Program of Management Controls 27

SECTION 4
THOMAS C. FISHER
Total System Concept — Bell Helicopter 33

SECTION 5
RAOUL S. DOBYNS
Solid Rocket Production — A Look To The Future 51

SECTION 6
RICHARD MUTHER
Systematic Layout Planning — A Patterned
Approach To Plant Layout Procedure 63

SECTION 7
RALPH O. SWALM
How Not To Make Equipment Replacement Decisions 71

SECTION 8
K. LIFSON
Work Sampling 77

SECTION 9
BURTON GRAD
A Model Of An Elementary Industrial Processing System 81

SECTION 10
JAMES R. WALKER
Control of Machine Member Position, Discrete vs. Continuous 89

SECTION 11
JOHN M. BARKSDALE
Work Measurement & Methods In The Process Industry 97

SECTION 12
WALTER G. SEINSHEIMER
Labor-Management Problems 99

SECTION 13
EDWARD LUFTIG
The Managerial Problems of Industry And
Their Industrial Engineering Implications 107

SECTION 14
L. R. BECHT
Improved Government Through Industrial Engineering 113

SECTION 15
HAROLD O. DAVIDSON
The Next Decade In Operations Research 121

SECTION 16
DALE JONES
Fair Day's Work Times 127

SECTION 17
SERGE A. BIRN
Master Clerical Data — Clerical Controls With Economy 135

SECTION 18
T. K. KOLNER
An Airline Spare Parts Problem 141

SECTION 19
NYLES V. REINFELD
New Uses and Practical Applications of Mathematical Programming 147

SECTION 20
HAROLD W. GEORGE
Scheduling and Control 155

SECTION 21
R. A. FULLER
New Horizons In Design Operations For Tomorrow's Engineering 161

SECTION 22
W. H. M. MORRIS
Physiology — Physical Input vs. Physical Output 173

SECTION 23
ROGER L. SISSON
An Appraisal Of The Status of Research On Production Scheduling 185

SECTION 24
J. M. BROWN
The Role Of Industrial Engineering Research In Industry 187

SECTION 25
JOHN M. ALLDERIGE
An Appraisal Of Work Measurement Research 189

SECTION 26
ALAN J. ROWE
Research In The Design Of Control Systems 199

SECTION 27
Chief Industrial Engineers' Symposium — Session 1
What The Operating Departments Expect From Industrial Engineering 209

SECTION 28
Chief Industrial Engineers' Symposium — Session 2
Measuring Industrial Engineering Performance 213

SECTION 29
ARTHUR A. SMITH
Economic Challenges In The Sixties 215

SECTION 30
JOHN D. COLEMAN
Engineering Astigmatism 217

SECTION 31
JAMES Q. DU PONT
Pattern For Success 223

Senior Chapters 227
Student Chapters 229